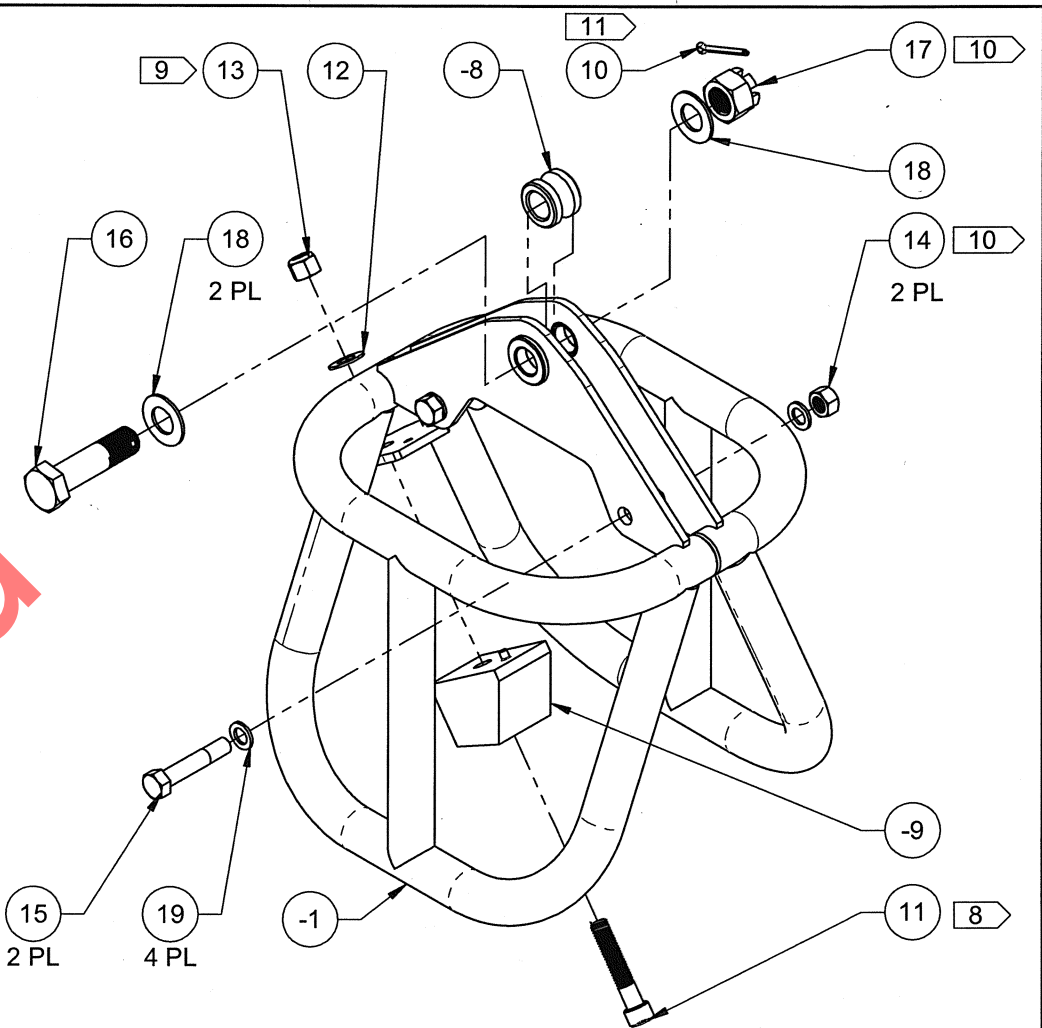
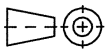
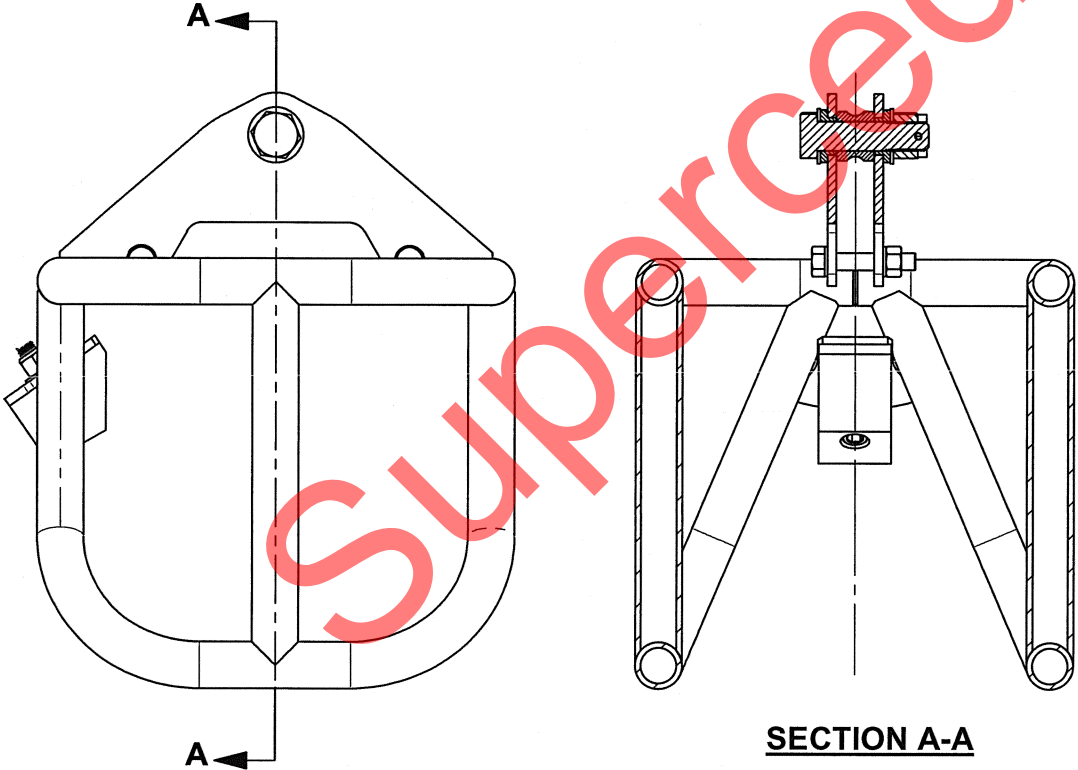


ITEM #	QTY	PART #	PART TITLE
-1	1	C3-C-1	WELDMENT C3 CAGE
-8	1	C3-C-8	LIFTING BUSHING
-9	1	C3-C-9	BUMPER
10	1	McMaster#90157A112 OR EQUIV	STEEL CAD PLATED COTTER PIN 1/8" DIA. X 1-1/4" LG.
11	1	McMaster#92562A358 OR EQUIV	CAD PLATED STEEL SOCKET HEAD SCREW 3/8"-16 X 2" LG.
12	1	McMaster#98023A031 OR EQUIV.	YELLOW ZINC PLATED GRADE 8 STEEL WASHER 0.406" ID. X 0.812" OD. X 0.051"-0.080" THK.
13	1	McMaster#97135A230 OR EQUIV.	ZINC YELLOW PLATED GRADE 8 STEEL NYLON INSERT LOCKNUT 3/8"-16
14	2	McMaster#94191A350 OR EQUIV	CAD PLATE GRADE 8 STEEL HEX NUT 3/8"-24
15	2	AN6-17A	CAD PLATE STEEL HEX BOLT 3/8"-24 X 1.953" LG.
16	1	AN10-22A	CAD PLATE STEEL HEX HEAD 5/8"-18 X 2.391" LG.
17	1	AN310-10	CAD PLATE STEEL CASTLE NUT 5/8"-18
18	2	NAS1149F1032P	STEEL WASHER 0.640" ID. X 1.188 OD. X 0.065" THK.
19	4	NAS1149F0663P	STEEL WASHER 0.390" ID. X 0.625" OD. X 0.063" THK.



F	SEE PREVIOUS PDFs FOR OLDER REV TEMPLATE UPDATED PER DART HAWKESBURY STANDARDS COMPLETE RE-DESIGN ITEM C3-19C CHANGED FOR C3-C-1 ITEM C3-18-7 CHANGED FOR C3-C-8 ITEM C3-18-9 CHANGED FOR C3-C-9 ITEM C3-18-10 McMaster#90576A118 REMOVED AND REPLACED BY McMaster#97135A230 ITEM C3-18-11 McMaster#91074A131 REMOVED AND REPLACED BY McMaster#98023A031 ITEM C3-19-1 McMaster#91257A833 REMOVE AND REPLACE BY AN10-22A ITEM C3-19-3 REMOVE AND REPLACE BY NAS1149F1032P ITEM C3-19-4 McMaster#98401A480 REPLACE BY McMaster#90157A112 ITEM AN960-616 CHANGED FOR NAS1149F0663P ITEM C3-18-1 CHANGED FOR ITEM C3-C-2 ITEM C3-18-2 CHANGED FOR ITEM C3-C-3 ITEM C3-18-3 CHANGED FOR ITEM C3-C-4 ITEM C3-18-4 CHANGED FOR ITEM C3-C-5 ITEM C3-18-5 CHANGED FOR ITEM C3-C-7 ITEM C3-18-6 CHANGED FOR ITEM C3-C-6	19-656	VM
REV.	DESCRIPTION	ECN #	BY
DESIGN	VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VM		
CHECKED	ML	TOOL PART #	REV. F
MFG. APPR.	FK	C3-C	SHEET 1 OF 10
APPROVED	WY	TITLE	SCALE
		C3 CAGE	NTS 
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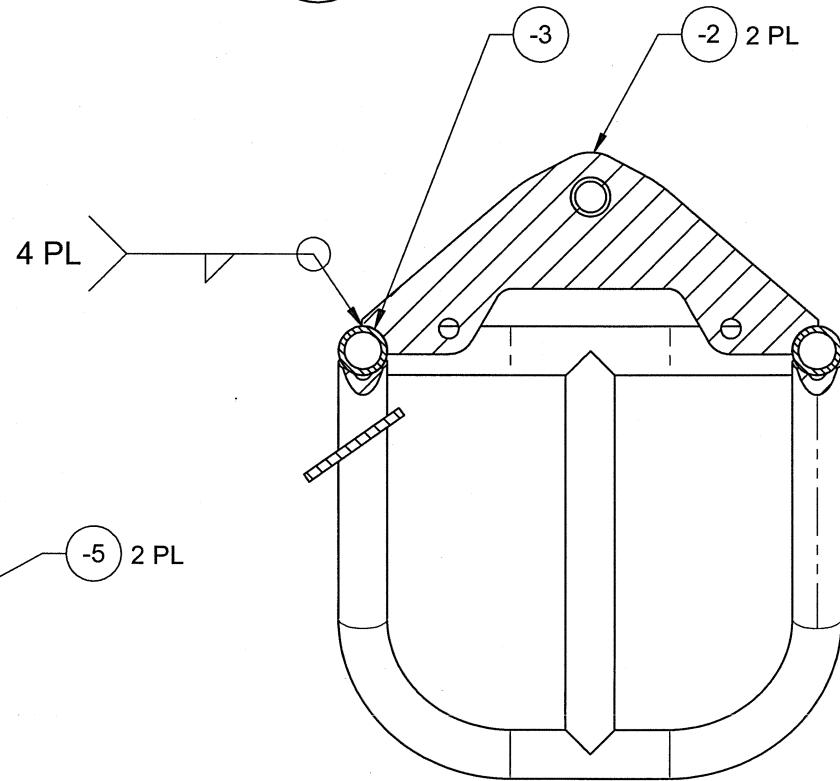
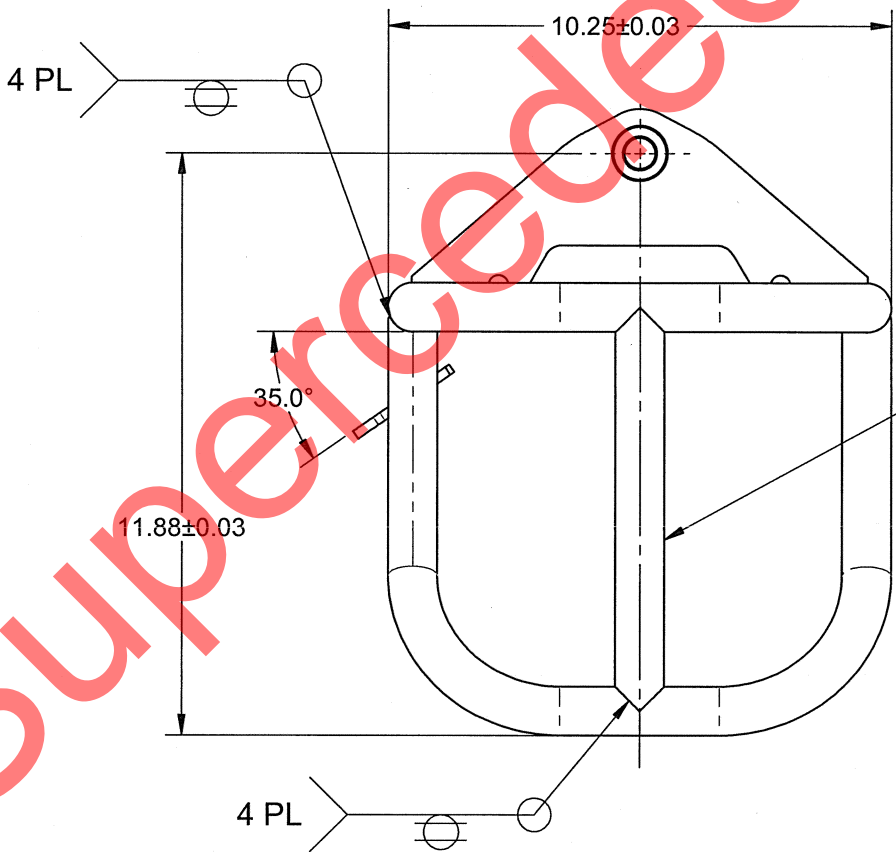
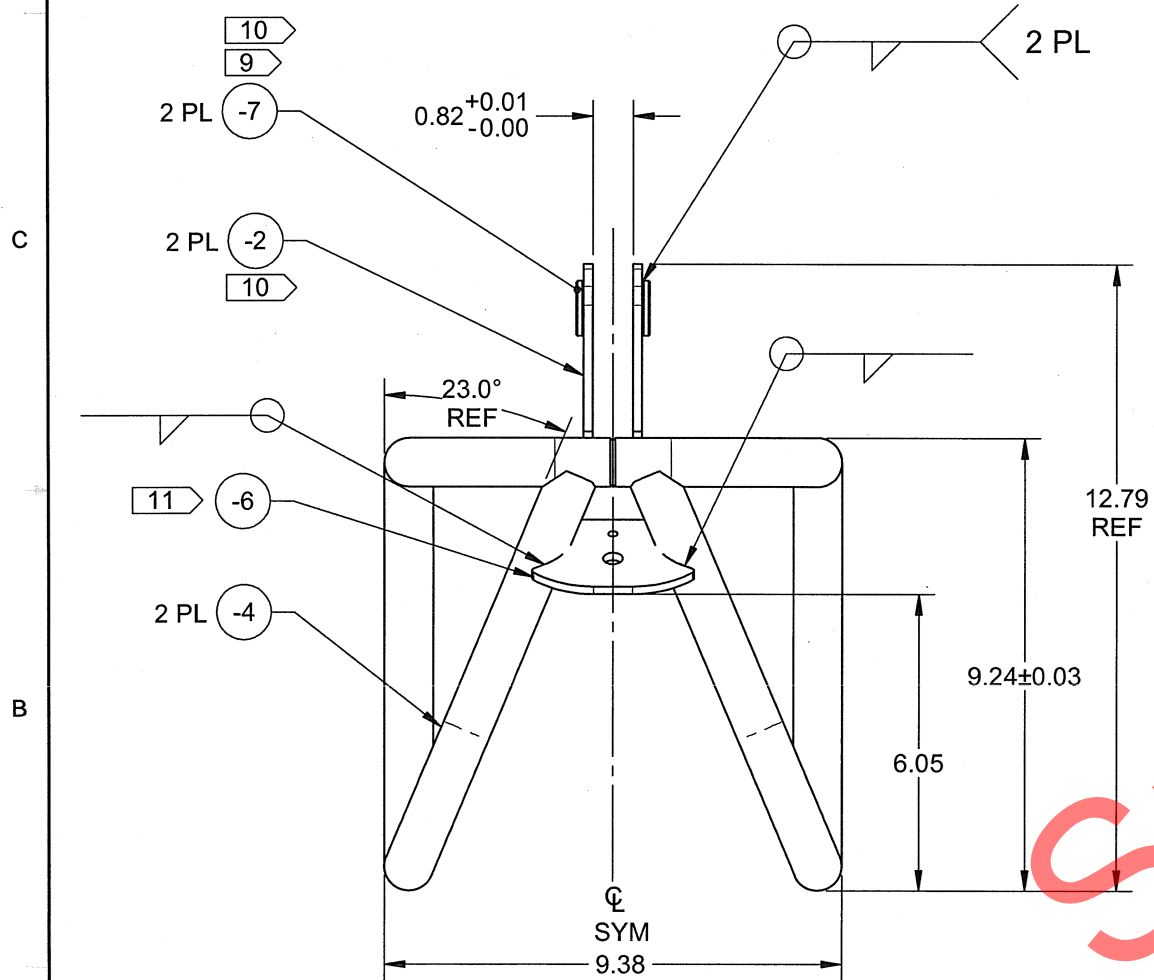
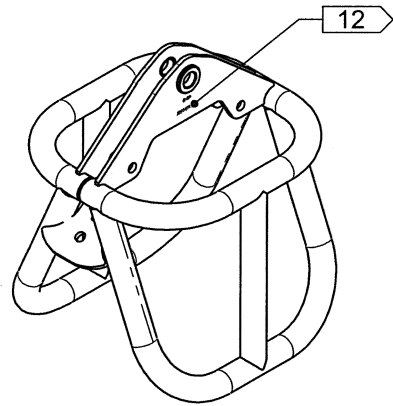
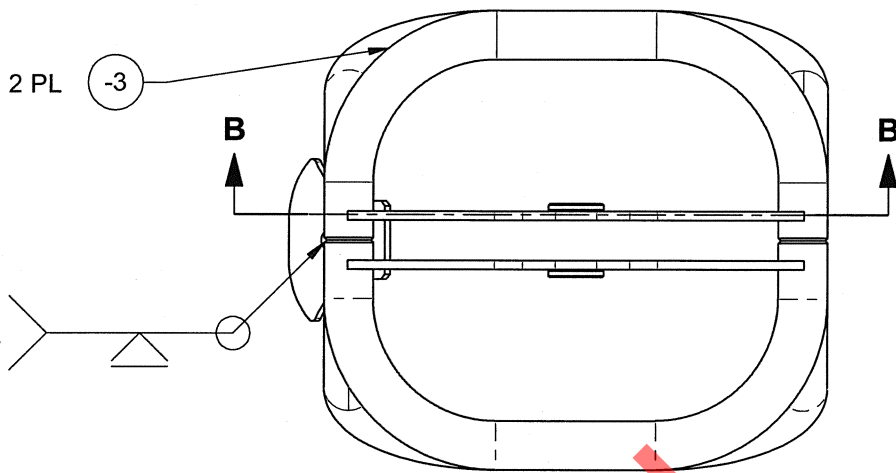
NOTES:  
1) MATERIAL: N/A  
2) HEAT TREAT: N/A  
3) FINISH: N/A  
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"  
5) UNITS: INCHES UNLESS OTHERWISE NOTED  
6) IDENTIFICATION: N/A  
7) ASSEMBLE AS SHOWN  
8) APPLY RED THREADLOCKER LOCTITE 263/262 ON THREADS OF ITEM 11 THEN ASSEMBLE WITH ITEM 13, AND REMOVE EXCESS  
9) TORQUE ITEM 13 TO 20-28 FT-LBS  
10) INSTALL ITEM 14 AND ITEM 17 HAND TIGHT  
11) DO NOT FOLD COTTER PIN



C3-C C3 CAGE

SECTION A-A

ITEM #	QTY	PART #	PART TITLE
-2	2	C3-C-2	LIFTING PLATE
-3	2	C3-C-3	TOP SEMI-RING
-4	2	C3-C-4	SIDE LOOP C3 CAGE
-5	2	C3-C-5	STIFFENER BAR
-6	1	C3-C-6	BUMPER BRACKET
-7	2	C3-C-7	BOSS

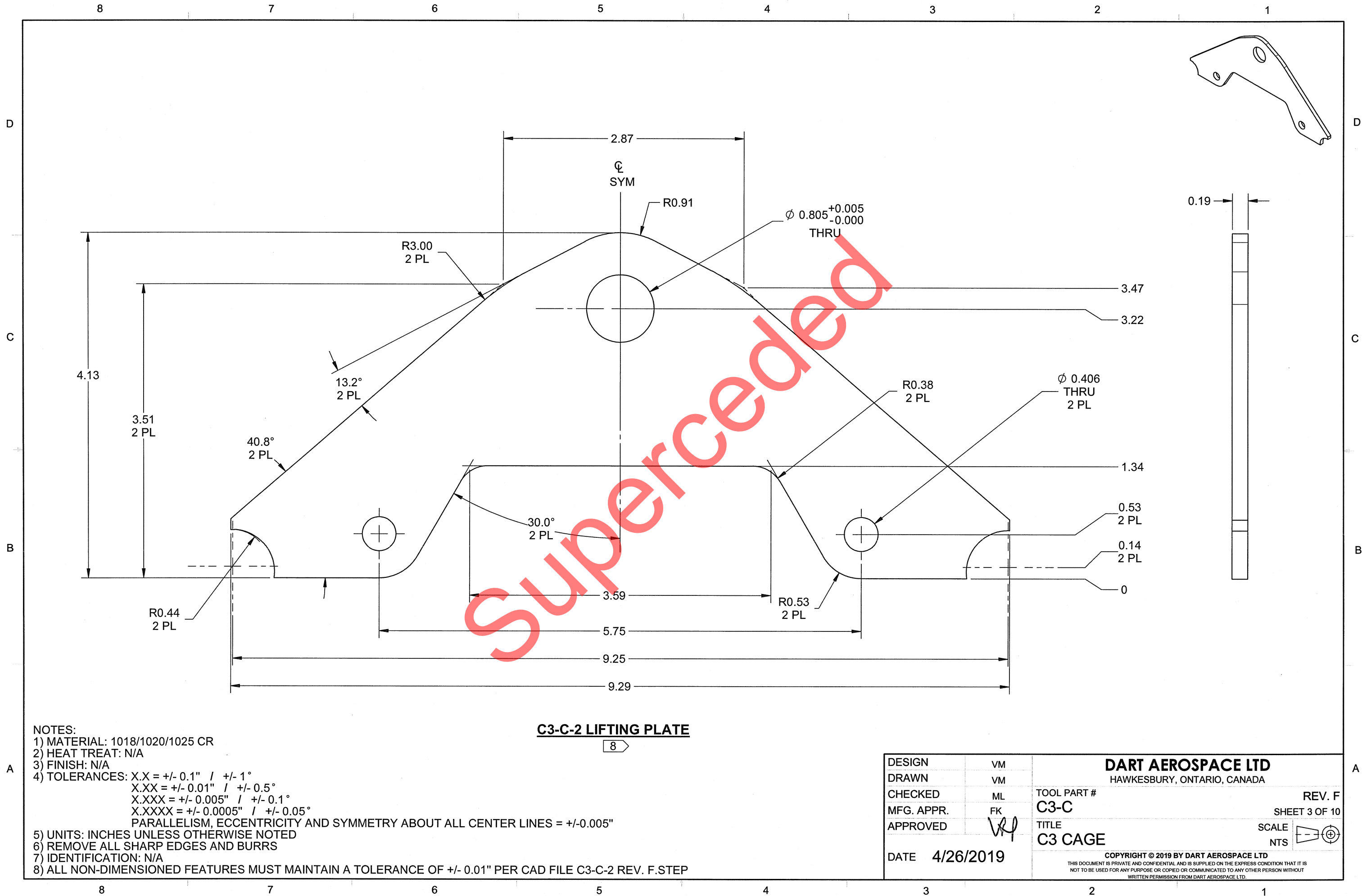


SECTION B-B

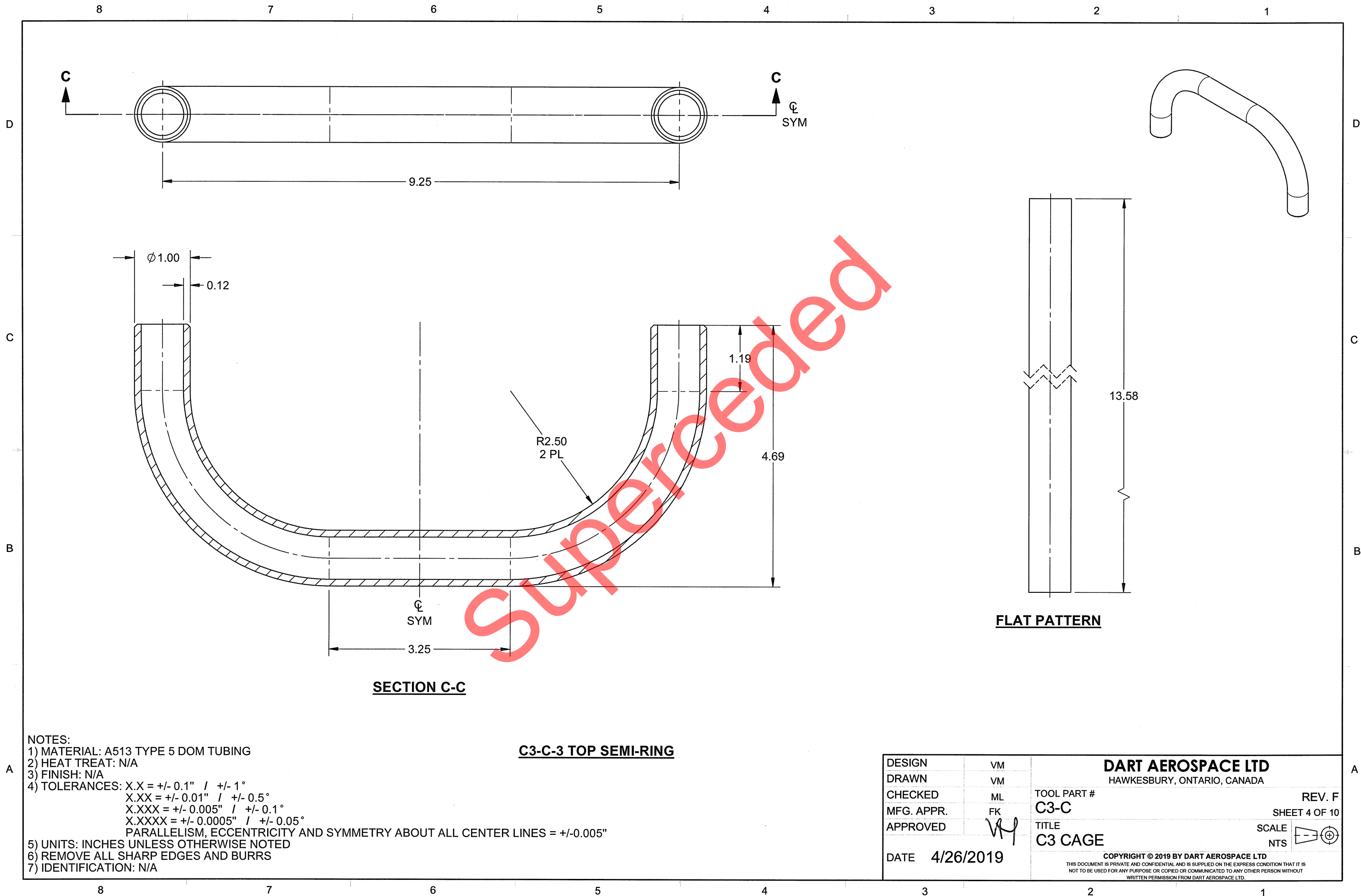
C3-C-1 WELDMENT C3 CAGE

- NOTES:
- 1) MATERIAL: N/A
  - 2) HEAT TREAT: N/A
  - 3) FINISH: POWDERCOAT RED QSI 005 OR MIL-PRF-24712
  - 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
  - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 6) IDENTIFICATION: N/A
  - 7) ASSEMBLE AS SHOWN
  - 8) REMOVE ALL SHARP EDGES, BURRS, AND WELD SPATTERS
  - 9) USE WELD FIXTURE C-3, FILLET AROUND ALL PART CONNECTIONS 100%
  - 10) HOLES OF BOTH SETS OF -2 AND -7 MUST ALIGN.
  - 11) TRIM ITEM-6 BUMPER BRACKET AS REQUIRED TO MATCH TUBES PROFILE FOR WELDING.
  - 12) INK STAMP T/N AND S/N PER QSI 044 AFTER POWDER COAT

DESIGN	VM	<b>DART AEROSPACE LTD</b>	
DRAWN	VM	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	TOOL PART #	REV. F
MFG. APPR.	FK	<b>C3-C</b>	SHEET 2 OF 10
APPROVED		TITLE	SCALE
		<b>C3 CAGE</b>	NTS
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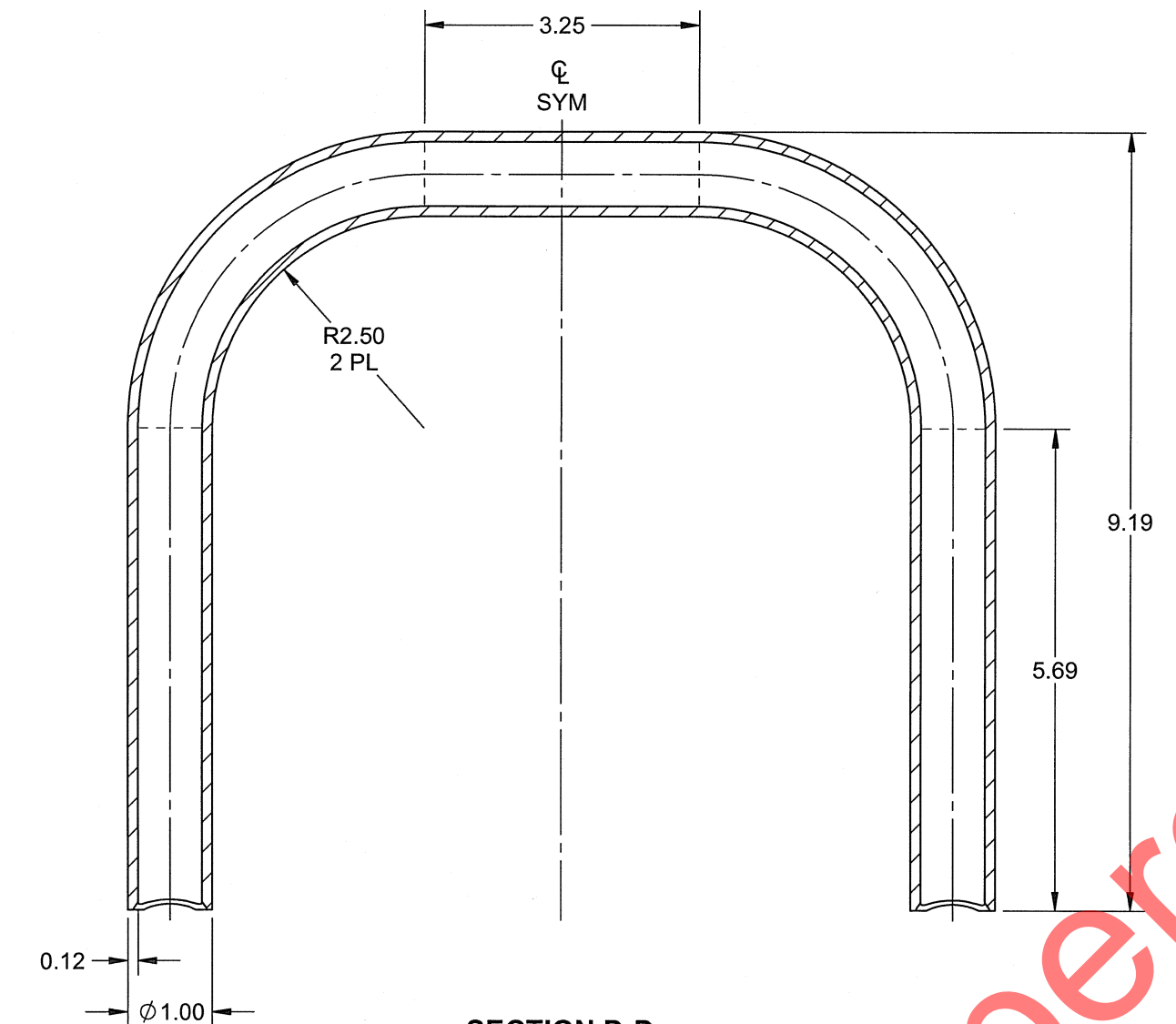
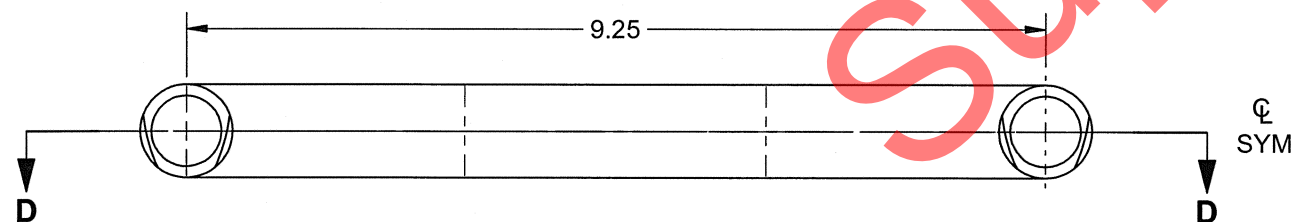
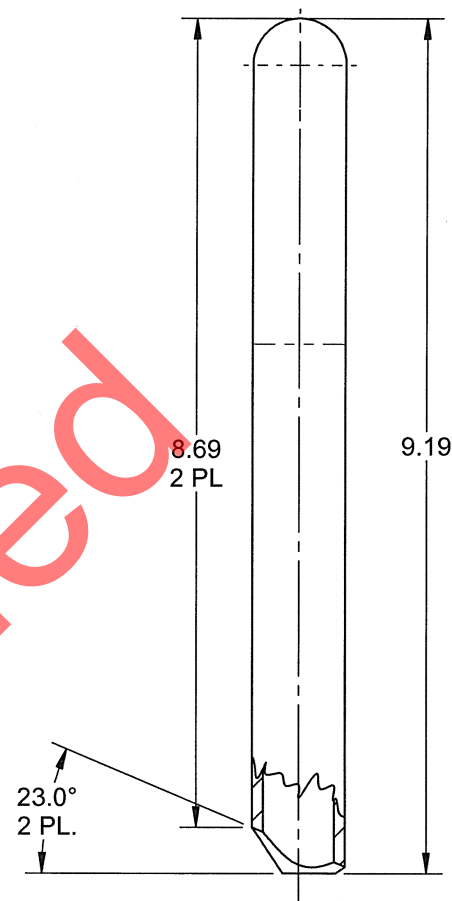
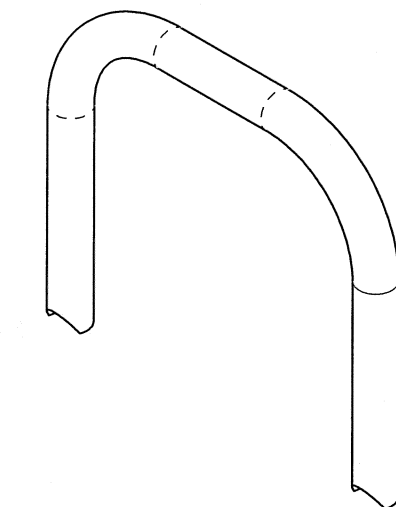
A

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**SECTION D-D****C3-C-4 SIDE LOOP C3 CAGE**23.0°  
2 PL.Ø1.00  
2 PL**VIEW E-E**  
ROTATED FOR  
CLARITY**FLAT PATTERN****NOTES:**

- 1) MATERIAL: A513 TYPE 5 DOM TUBING
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°

PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"

- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A

DESIGN	VM	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	VM		
CHECKED	ML	TOOL PART #	REV. F
MFG. APPR.	FK	<b>C3-C</b>	SHEET 5 OF 10
APPROVED		TITLE	SCALE
		<b>C3 CAGE</b>	NTS
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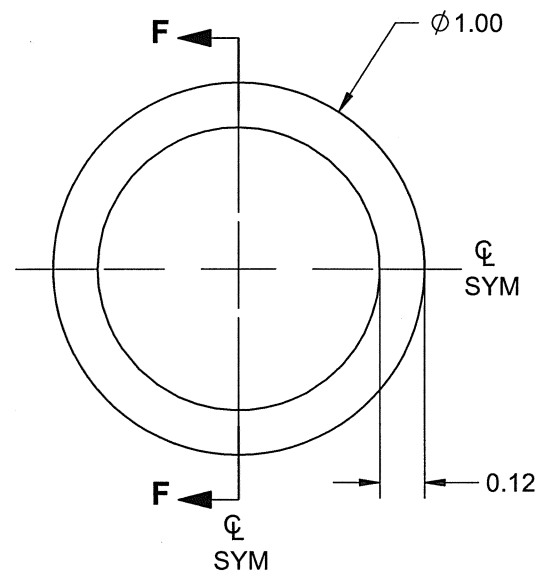
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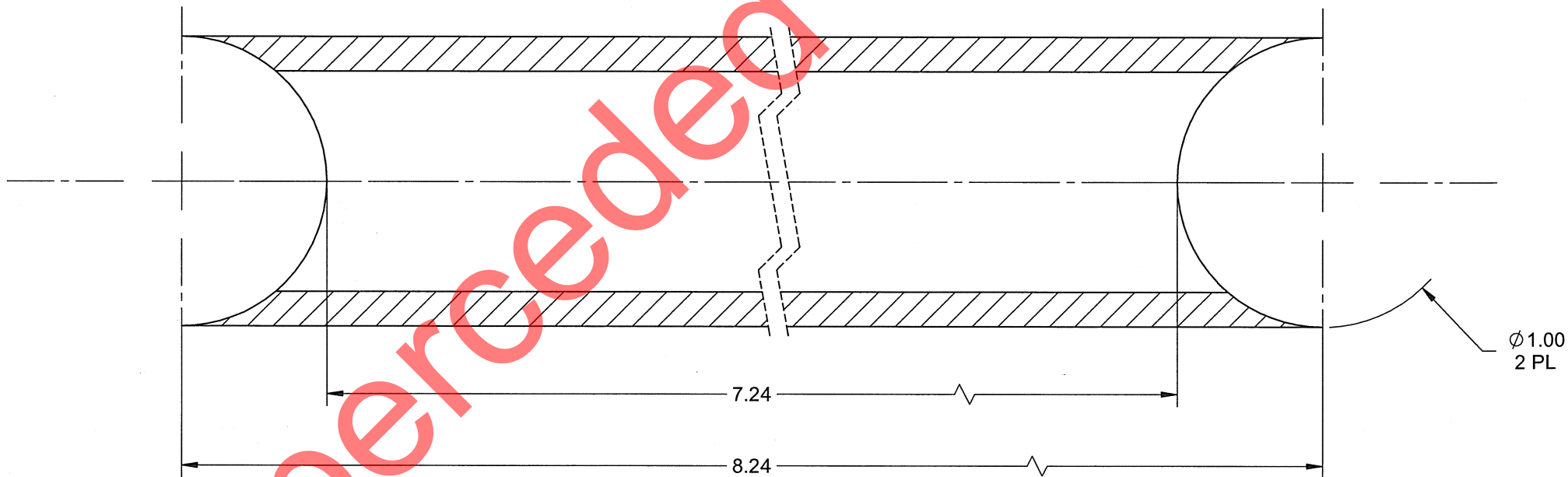
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C3-C-5 STIFFENER BAR



SECTION F-F

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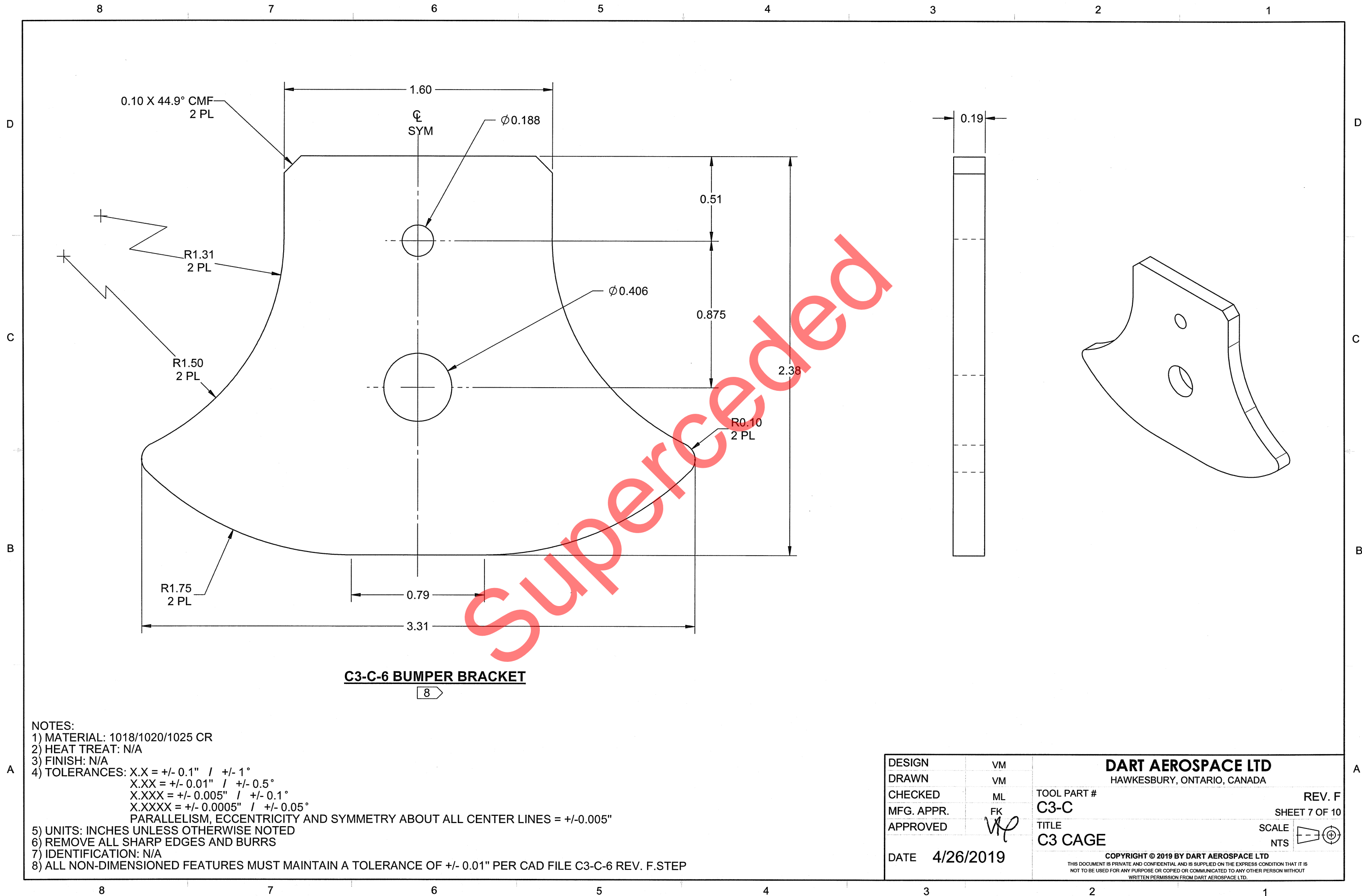
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NOTES:  
1) MATERIAL: A513 TYPE 5 DOM TUBING  
2) HEAT TREAT: N/A  
3) FINISH: N/A  
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°  
X.XX = +/- 0.01" / +/- 0.5°  
X.XXX = +/- 0.005" / +/- 0.1°  
X.XXXX = +/- 0.0005" / +/- 0.05°  
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"  
5) UNITS: INCHES UNLESS OTHERWISE NOTED  
6) REMOVE ALL SHARP EDGES AND BURRS  
7) IDENTIFICATION: N/A

DESIGN	VM	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	VM		
CHECKED	ML	TOOL PART #	REV. F
MFG. APPR.	FK	C3-C	SHEET 6 OF 10
APPROVED	VP	TITLE	SCALE
		C3 CAGE	NTS
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8 7 6 5 4 3 2 1



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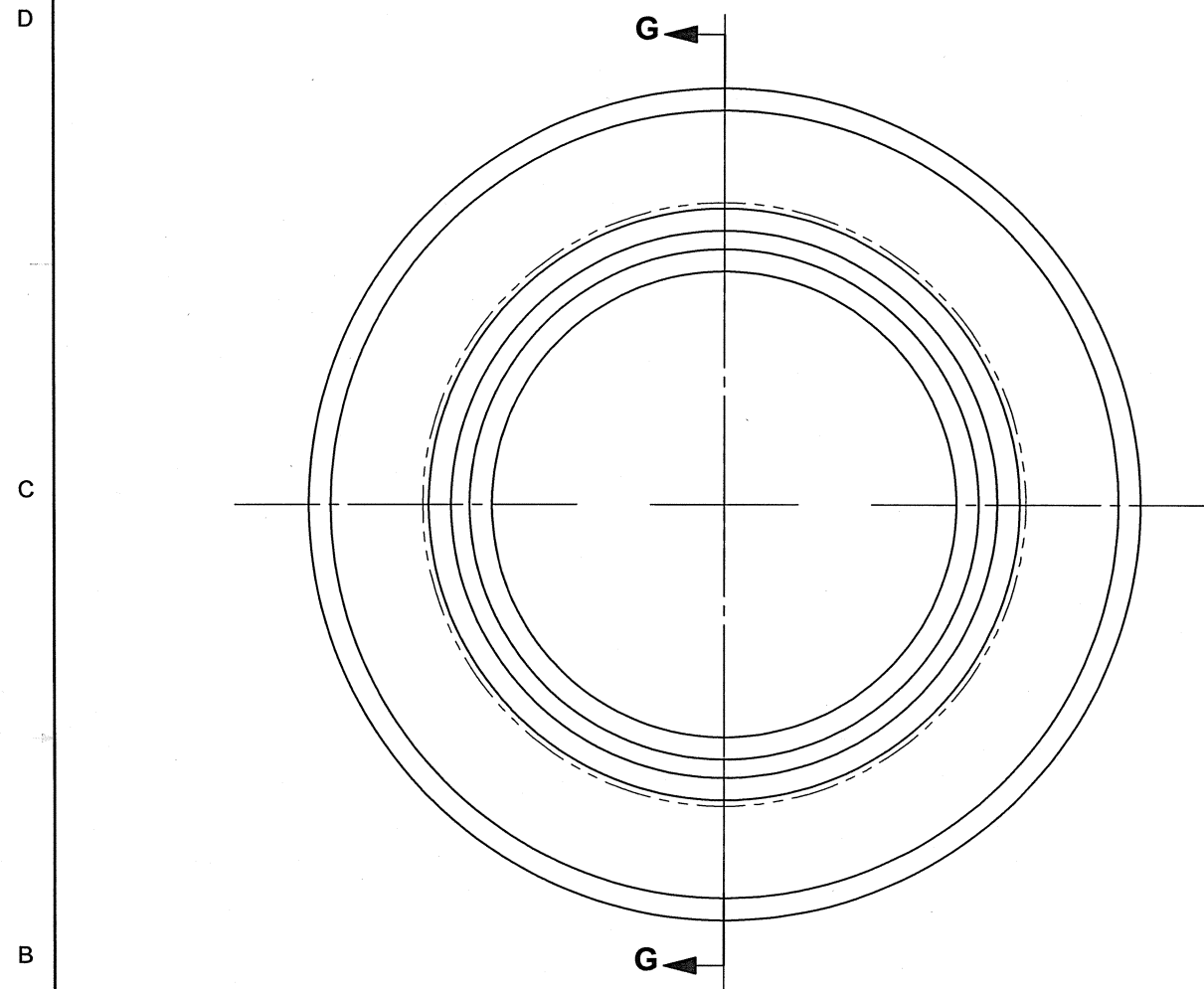
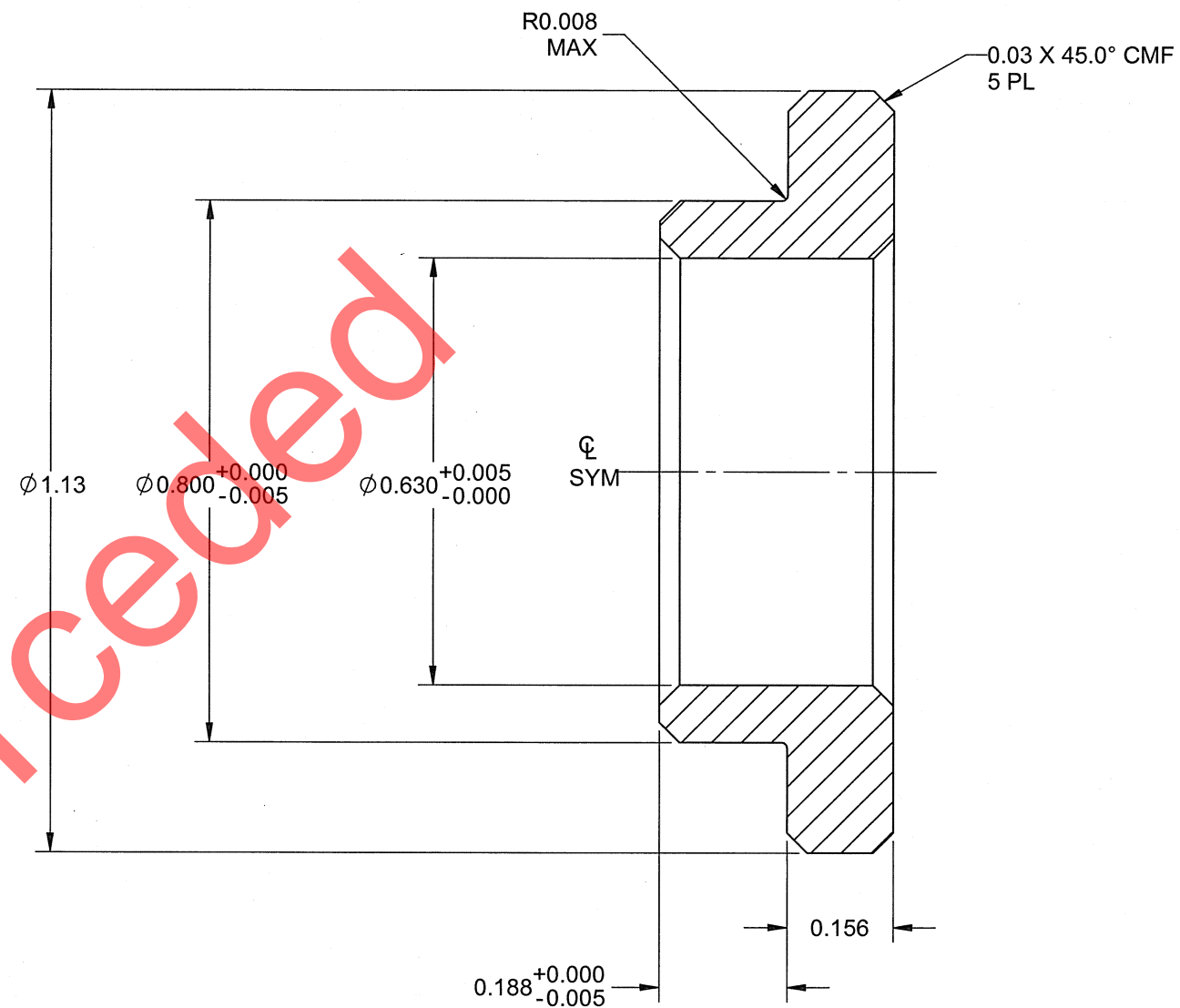
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**C3-C-7 BOSS****SECTION G-G****NOTES:**

- 1) MATERIAL: 1018/1020/1025 CR
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X =  $\pm 0.1''$  /  $\pm 1^\circ$   
X.XX =  $\pm 0.01''$  /  $\pm 0.5^\circ$   
X.XXX =  $\pm 0.005''$  /  $\pm 0.1^\circ$   
X.XXXX =  $\pm 0.0005''$  /  $\pm 0.05^\circ$   
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES =  $\pm 0.005''$
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A

DESIGN	VM	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	VM		
CHECKED	ML	TOOL PART #	REV. F
MFG. APPR.	FK	<b>C3-C</b>	SHEET 8 OF 10
APPROVED	VP	TITLE	SCALE
		<b>C3 CAGE</b>	NTS
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